

PTO/SB/21 (09-04)

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**TRANSMITTAL  
FORM**

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

9

Application Number

10/709,611

Filing Date

05/18/2004

First Named Inventor

Li-Ming Tseng

Art Unit

2636

Examiner Name

NGUYEN, HUNG T

Attorney Docket Number

ACMP0046USA

**Certificate****APR 20 2006****of Correction****ENCLOSURES (Check all that apply)**

Fee Transmittal Form



Fee Attached



Amendment/Reply



After Final



Affidavits/declaration(s)



Extension of Time Request



Express Abandonment Request



Information Disclosure Statement



Certified Copy of Priority Document(s)

Reply to Missing Parts/  
Incomplete ApplicationReply to Missing Parts  
under 37 CFR 1.52 or 1.53

Drawing(s)



Licensing-related Papers



Petition

Petition to Convert to a  
Provisional Application

Power of Attorney, Revocation



Change of Correspondence Address



Terminal Disclaimer



Request for Refund



CD, Number of CD(s) \_\_\_\_\_



Landscape Table on CD



After Allowance Communication to TC

Appeal Communication to Board  
of Appeals and InterferencesAppeal Communication to TC  
(Appeal Notice, Brief, Reply Brief)

Proprietary Information



Status Letter

Other Enclosure(s) (please identify  
below):

1. A copy of front page of Patent

2. A copy of Corrected Filing  
Receipt

3. A copy of Notice of Recordation

Remarks

Request for Certificate of Correction of Office Mistake

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

Firm Name

North America Intellectual Property Corporation

Signature

*Winston Hsu*

Printed name

Winston Hsu

Date

APR 17 2006

Reg. No.

41,526

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*Stephanie Lai*

Typed or printed name

Stephanie Lai

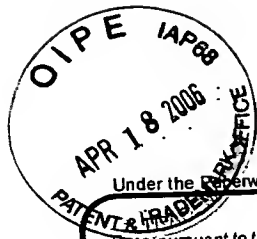
Date

APR 17 2006

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APR 21 2006



PTO/SB/17 (12-04v2)

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U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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Effective on 12/08/2004.

Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

**FEE TRANSMITTAL**  
**For FY 2005**☐ Applicant claims small entity status. See 37 CFR 1.27TOTAL AMOUNT OF PAYMENT (\$) **0.00****Complete if Known**

Application Number	10/709,611
Filing Date	05/18/2004
First Named Inventor	Li-Ming Tseng
Examiner Name	NGUYEN, HUNG T
Art Unit	2636
Attorney Docket No.	ACMP0046USA

**METHOD OF PAYMENT (check all that apply)**☐ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): \_\_\_\_\_☒ Deposit Account Deposit Account Number: **50-3105** Deposit Account Name: **North America Intellectual Property Corporation**

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

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**FEE CALCULATION****1. BASIC FILING, SEARCH, AND EXAMINATION FEES**

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Small Entity	Fee (\$)	Small Entity	Fee (\$)	Small Entity	Fee (\$)	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

**2. EXCESS CLAIM FEES**

Fee Description	Small Entity	Fee (\$)	Fee Paid (\$)
Each claim over 20 (including Reissues)	50	25	
Each independent claim over 3 (including Reissues)	200	100	
Multiple dependent claims	360	180	
Multiple Dependent Claims		Fee (\$)	Fee Paid (\$)
Total Claims	Extra Claims	Fee (\$)	Fee Paid (\$)
- 20 or HP =	x	=	
HP = highest number of total claims paid for, if greater than 20.			
Indep. Claims	Extra Claims	Fee (\$)	Fee Paid (\$)
- 3 or HP =	x	=	
HP = highest number of independent claims paid for, if greater than 3.			

**3. APPLICATION SIZE FEE**

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee (\$)	Fee Paid (\$)
- 100 =	/ 50	(round up to a whole number) x	=	

**4. OTHER FEE(S)**

Non-English Specification, \$130 fee (no small entity discount)

Other (e.g., late filing surcharge): \_\_\_\_\_

SUBMITTED BY	Registration No.	Telephone
Signature <i>Winston Hsu</i>	(Attorney/Agent) 41,526	3027291562
Name (Print/Type) Winston Hsu		Date APR 17 2006

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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APR 21 2006



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent No. : 7,023,352 B2  
Issue Date : Apr. 4, 2006  
Inventor : Li-Ming Tseng et al.  
Docket No. : ACMP0046USA

Title: VOLTAGE-DETECTING METHOD AND RELATED CIRCUITS

To: Commissioner for Patents  
P.O. BOX 1450  
Alexandria, VA 22313-1450

Subject: Request for Certificate of Correction of Office Mistake

The name of the second inventor listed on the front page of the Patent is incorrect (Attachment 1). Documents on record indicate this as an Office mistake of consequence.

The applicant hereby requests that a Certificate of Correction be issued under 37 CFR 1.322 to correct the name of the assignee from **Jen-Hong Lan** to **Jen-Hong Larn** which was correctly listed on the Corrected Filing Receipt dated 08/03/2004 (Attachment 2) and the Notice of Recordation dated 05/18/2004 (Attachment 3).

APR 21 2006

Respectfully submitted,

Winston Hsu

Date: APR 17 2006

Winston Hsu, Patent Agent No. 41,526

P.O. BOX 506, Merrifield, VA 22116, U.S.A.

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APR 21 2006



US007023352B2

(12) **United States Patent**  
Tseng et al.

(10) **Patent No.:** US 7,023,352 B2  
(45) **Date of Patent:** Apr. 4, 2006

(54) **VOLTAGE-DETECTING METHOD AND RELATED CIRCUITS**

(56) **References Cited**

(75) Inventors: **Li-Ming Tseng**, Taipei (TW);  
**Jen-Hong Lan**, I-Lan Hsien (TW)

**U.S. PATENT DOCUMENTS**

4,709,202 A \* 11/1987 Koenck et al. .... 320/112  
5,900,717 A \* 5/1999 Lee ..... 320/150

(73) Assignee: **BenQ Corporation**, Tao-Yuan Hsien (TW)

\* cited by examiner

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 133 days.

*Primary Examiner*—Hung Nguyen  
(74) *Attorney, Agent, or Firm*—Winston Hsu

(57) **ABSTRACT**

(21) Appl. No.: 10/709,611

(22) Filed: May 18, 2004

(65) **Prior Publication Data**

US 2004/0233064 A1 Nov. 25, 2004

(30) **Foreign Application Priority Data**

May 20, 2003 (TW) ..... 92113640 A

(51) **Int. Cl.**  
**G08B 21/00** (2006.01)

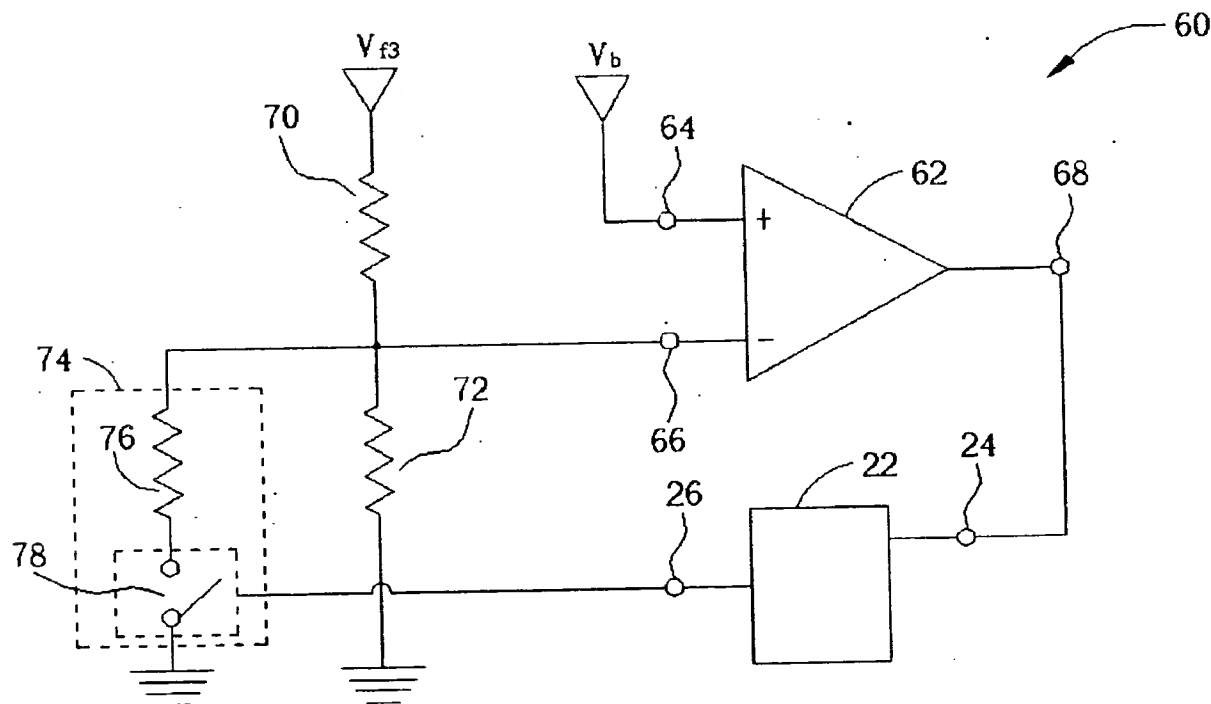
(52) **U.S. Cl.** ..... 340/636.1; 340/636.12;  
340/636.15; 340/635; 340/653; 340/660;  
340/662; 340/663; 320/136; 320/150

(58) **Field of Classification Search** ..... 340/636.1,  
340/636.12, 636.15; 635, 653, 660, 662,  
340/663; 320/124, 125, 136, 150, 151, 153

See application file for complete search history.

A voltage-detecting circuit includes a CPU, a comparator, a first resistor, a second resistor, and at least a power level segment detector connected in parallel with the first resistor, the power level segment detector having a third resistor and a first switch serially connected to the third resistor. The battery is electrically connected to a first input end of the comparator. The first resistor is electrically connected between a second input end of the comparator and a reference voltage. The second resistor is electrically connected between the second input end of the comparator and ground. The method includes outputting a control signal with the CPU to control the first switch by determining voltage levels at the output end of the comparator, and outputting a power indication signal with the CPU to indicate the voltage level of the battery by determining voltage levels at the output end of the comparator.

20 Claims, 3 Drawing Sheets



Attachment >

950728



UNITED STATES PATENT AND TRADEMARK OFFICE

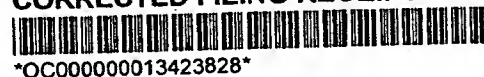
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APPL NO.	FILING OR 371 (c) DATE	ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	DRAWINGS	TOT CLMS	IND CLMS
10/709,611	05/18/2004	2632	770	ACMP0046USA	3	20	2

CONFIRMATION NO. 3610

027765  
NAIPO (NORTH AMERICA INTERNATIONAL PATENT OFFICE)  
P.O. BOX 506  
MERRIFIELD, VA 22116

CORRECTED FILING RECEIPT



\*OC000000013423828\*



Date Mailed: 08/03/2004

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Filing Receipt Corrections, facsimile number 703-746-9195. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s)

Li-Ming Tseng, Taipei City, TAIWAN;  
Jen-Hong Lam I-Lan Hsien, TAIWAN;

To: 明基 陳志清先生  
A91284

Domestic Priority data as claimed by applicant

Foreign Applications

TAIWAN 092113640 05/20/2003

If Required, Foreign Filing License Granted: 07/01/2004

Projected Publication Date: 11/25/2004

Non-Publication Request: No

Early Publication Request: No

Title

VOLTAGE-DETECTING METHOD AND RELATED CIRCUITS

Preliminary Class

Filing Receipt 1 page

From 北美商千惠

AUG 10 2004

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Title 37, Code of Federal Regulations, 5.11 & 5.15**

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\*800011952A\*

MAY 18, 2004

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P.O. BOX 506  
MERRIFIELD, VA 22116

Zoe Tseng

2004/6/14

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RECORDATION DATE: 05/18/2004

REEL/FRAME: 014622/0795  
NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:  
TSENG, LI-MING

DOC DATE: 05/10/2004

ASSIGNOR:  
LARN, JEN-HONG

DOC DATE: 05/10/2004

ASSIGNEE:  
BENQ CORPORATION  
NO. 157, SHAN-YING ROAD, GUEISHAN  
TAO-YUAN HSIEN, TAIWAN

SERIAL NUMBER: 10709611

FILING DATE:

PATENT NUMBER:

ISSUE DATE:

TITLE: VOLTAGE-DETECTING METHOD AND RELATED CIRCUITS

DOCKET NUMBER: ACPMP0046USA



014622/0795 PAGE 2

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ASSIGNMENT DIVISION  
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